

What is claimed is:

- 1 1. A communication apparatus, comprising:
 - 2 a channel estimator to estimate channel parameters for a communication
 - 3 channel based on a signal received from the communication channel; and
 - 4 a quality measure target generator to generate a quality measure target value for
 - 5 the communication apparatus using channel parameters estimated by said channel
 - 6 estimator, said quality measure target value representing a desired value for a quality
 - 7 measure associated with the communication apparatus.

- 1 2. The communication apparatus of claim 1, wherein:
 - 2 said quality measure target generator generates a signal to interference ratio
 - 3 (SIR) target value.

- 1 3. The communication apparatus of claim 1, wherein:
 - 2 said quality measure target generator includes a quality measure target estimator
 - 3 to determine an estimated quality measure target value using channel parameters
 - 4 estimated by said channel estimator and a quality measure target correction unit to
 - 5 correct said estimated quality measure target value based on performance information.

- 1 4. The communication apparatus of claim 3, wherein:
 - 2 said performance information includes block error rate (BLER) information.

- 1 5. The communication apparatus of claim 1, wherein:
 - 2 said quality measure target generator generates said quality measure target value
 - 3 using symbol energy variance information associated with the communication channel.

- 1 6. The communication apparatus of claim 1, comprising:
 - 2 a quality measure estimator to estimate an actual quality measure value for a
 - 3 signal received from the communication channel.

- 1 7. The communication apparatus of claim 6, comprising:
2 a message generator to generate a power control message based on the
3 estimated quality measure value and the quality measure target value.
- 1 8. The communication apparatus of claim 1, wherein:
2 said communication apparatus is a handheld communicator.
- 1 9. The communication apparatus of claim 1, wherein:
2 said communication apparatus is a base station transceiver.
- 1 10. The communication apparatus of claim 1, wherein:
2 said communication apparatus is part of a code division multiple access
3 (CDMA) system.
- 1 11. A method for generating a quality measure target value within a communication
2 apparatus, comprising:
3 estimating channel parameters for a communication channel based on a signal
4 received from the communication channel; and
5 calculating the quality measure target value using the estimated channel
6 parameters.
- 1 12. The method of claim 11, wherein:
2 calculating the quality measure target value includes determining an estimated
3 quality measure target value using the estimated channel parameters.
- 1 13. The method of claim 12, wherein:
2 calculating the quality measure target value further includes correcting the
3 estimated quality measure target value based on performance information associated
4 with the communication apparatus.

1 14. The method of claim 13, wherein:
2 said performance information includes block error rate (BLER) information.

1 15. The method of claim 11, wherein:
2 estimating channel parameters includes estimating at least one of the following:
3 the number of paths in the communication channel, the strengths of paths in the
4 communication channel, the relative velocity of the communication apparatus, the
5 fading rates of paths in the communication channel, symbol energy variances in the
6 communication channel, and variances between symbols of different blocks within the
7 communication channel.

1 16. The method of claim 11, wherein:
2 calculating the quality measure target value includes calculating a signal to
3 interference ratio (SIR) target.

1 17. A communication apparatus, comprising:
2 a channel estimator to estimate channel parameters for a communication
3 channel based on a signal received from the communication channel;
4 a performance estimator to estimate a performance parameter of the
5 communication apparatus; and
6 a quality measure target generator to generate a quality measure target value for
7 the communication apparatus, wherein said quality measure target generator generates
8 said quality measure target value using channel parameters estimated by said channel
9 estimator and the estimated performance parameter determined by said performance
10 estimator.

1 18. The communication apparatus of claim 17, wherein:
2 said performance estimator estimates a receive error rate of the communication
3 apparatus and said quality measure target generator uses said receive error rate to
4 generate the quality measure target value.

- 1 19. The communication apparatus of claim 17, wherein:
2 said quality measure target generator uses the channel parameters to determine
3 an approximate quality measure target value and the estimated performance parameter
4 to correct the approximate quality measure target value.
- 1 20. The communication apparatus of claim 17, wherein:
2 said channel estimator estimates at least one of the following: the number of
3 paths in the communication channel, the strengths of paths in the communication
4 channel, the relative velocity of the communication apparatus, the fading rates of paths
5 in the communication channel, symbol energy variances in the communication channel,
6 and variances between symbols of different blocks within the communication channel.
- 1 21. The communication apparatus of claim 17, comprising:
2 a quality measure estimator to estimate a quality measure of the signal received
3 from the communication channel; and
4 a message generator to generate a power control message based on the
5 estimated quality measure and the quality measure target value.
- 1 22. A mobile communicator, comprising:
2 a first quality measure target generator to generate a first quality measure target
3 value for a first remote base station using estimated channel parameters for a
4 communication channel between said mobile communicator and said first remote base
5 station;
6 a second quality measure target generator to generate a second quality measure
7 target value for a second remote base station using estimated channel parameters for a
8 communication channel between said mobile communicator and said second remote
9 base station; and

10 a site selection manager to select a remote base station to act as a servicing base
11 station for the mobile communicator using at least said first quality measure target
12 value and said second quality measure target value.

1 23. The mobile communicator of claim 22, wherein:
2 said first and second quality measure target generators include SIR target
3 generators.

1 24. The mobile communicator of claim 22, comprising:
2 at least one other quality measure target generator to generate at least one other
3 quality measure target value for at least one other remote base station, wherein said site
4 selection manager uses said at least one other quality measure target value to select said
5 remote base station to act as said servicing base station.

1 25. The mobile communicator of claim 22, further comprising:
2 a message generator to generate a power control message for a remote base
3 station based on a corresponding quality measure target value.